

PRO GUIDE / SLEEVE

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SKYWALK

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1 INTRODUCTION

Welcome to skywalk!

Congratulations on the purchase of your new SLEEVE and thank you for your trust in us and in our products. In this manual you will find information that will help you quickly get to know your new harness to ensure your fun for a long time. At skywalk we are enthusiastic about wind sports and innovative technologies. When we founded skywalk in 2001, our goal was to make paragliders, harnesses and accessories that offer new solutions to set new impulses, and to provide customers with a maximum of user friendliness. Today we are one of the most successful paraglider manufacturers in the world. For this we are thankful for our curiosity about everything that flies, sails and surfs, as well as our interest in a variety of outdoor sports. It's this "big picture" view that allows us to continuously set new accents in paragliding. We are always open for questions, comments or critique and are happy to provide you at any time with further information!

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The latest version of the manual can be found on
www.skywalk.info

2 DESCRIPTION

The SLEEVE is a simply constructed loop strap harness that meets the high demands of trailrunners, mountaineers and Hike&Fly enthusiasts. The seat shell encloses the body perfectly and ensures high comfort with lowest weight.

When designing the geometry and flight dynamics, care was taken to ensure that the harness is intuitive, easy and safe to use in alpine terrain conditions.



THE TYPE CERTIFICATE AND THE DATE OF THE FACTORY INSPECTION CAN BE FOUND ON THE LEFT SIDE ABOVE THE PULLEY. SHOULD THIS BE MISSING, ASSUME THAT THIS HARNESS IS A PROTOTYPE THAT HAS NOT BEEN TESTED.

SCOPE OF DELIVERY

- Harness
- Storage bag
- 2 skywalk HIKE carabiners



3 SAFETY NOTICE

With the purchase of this equipment, you assume the full responsibility and accept all risks associated with the use of paragliding equipment, including injury and death. Improper use of paragliding equipment increases this risk. To fly a paraglider, you must be in possession of the required license or permit for the country in which you are flying. Neither skywalk nor the seller nor the importer of this product can be made liable in case of personal injury or damage caused to a third party.

LIABILITY AND WARRANTY EXCLUSIONS

If any of the following cases apply, the harness may not be flown under the terms of the warranty and liability rules:

- $\rightarrow~$ In the event of any modifications to the harness that are not within the tolerances allowed by the manufacturer.
- \rightarrow In case of improper repairs.
- $\rightarrow\,$ If the inspection period has expired, or if the inspection is carried out by unauthorized persons.
- \rightarrow Winch launches.
- \rightarrow In case of insufficient license of the pilot.

SAFETY NOTICES

If a product is found to be defective in operation which may affect other specimens of a type, safety notices are issued. These notices will be published on the skywalk homepage and on the homepage of the respective type testing station. Safety notices contain instructions on how to check the equipment for possible defects and what measures are required to remedy the respective defect



THE IMPLEMENTATION OF THE MEASURES FROM THE SAFETY NOTICES IS THE RESPONSIBILITY OF THE OWNER OF THE PRODUCT.

SKYWALK

4 FEATURES

- 1 HIKE screw carabiner incl. sling protector Ultralight carabiner for Hike&Fly use. The sling protector holds the straps in position and prevents the carabiner from twisting.
- 2 Shoulder straps

The lenght can be adjusted with a knot.

3 - **Sternum strap** Holds the shoulder straps together. Can be removed.

4 - Smart Link System

Marked seams to ensure that the harness is closed properly and the risers are hooked in correctly - red = left; blue = right

5 - Nitinol reinforcement

Increases flight comfort.

6 - Accelerator eyelets

An accelerator can be fitted subsequently.



5 MOUNTING THE FRONT CONTAINER

The SLEEVE does not have an integrated rescue container, but can be equipped with a standard front container such as the skywalk DROP. To connect the front container statically with the harness, the front container should be attached to the harness at least three places. The initial installation of the reserve chute must be carried out by an approved compatibility technician.

This verifies the deployability of the reserve chute and certifies its compatibility on the reserve chute's packing and inspection document. It is very important that the test release of the rescue device is carried out by the pilot himself sitting in the harness in a harness simulator, as different physiques and forces affect its deployability.

Before installation, you must first check whether the reserve chute needs to be repacked.



IF A FRONT CONTAINER IS USED, THE CARABINER OPENINGS MUST FACE BACKWARDS. ONLY THUS THE RESCUE V-LINE CAN RUN UP UNDISTURBED IN THE EVENT OF AN RESCUE RELEASE. FURTHERMORE, THE RESCUE MUST ALWAYS BE HOOKED IN BEFORE THE PARAGLIDER WILL BE HOOKED IN.

STEERABLE RESCUE CHUTES

The harness is not suitable for the use of steerable rescue chutes.

COMPATIBILITY TEST

The correct installation of the reserve chute should now be verified with a test deployment. To do this, put on the harness, close the leg loops and hang the main carabiners in a harness simulator. Then pull out the reserve chute by the handle.

For this test, it is not enough to deploy the reserve chute without sitting in the harness. It must be possible for you to reach and pull the handle with no problem from the flying position, in accordance with the instructions of this manual.

The deployment force must not be below 2 daN and must not exceed 7 daN. In case of uncertainties you should consult a specialist or contact your competent skywalk dealer. The reserve chute must be deployed with the correct throwing technique, with a continuous and steady pull in a forward movement away from the harness. Otherwise, deployment may be difficult.

DEPLOYMENT OF THE RESCUE

Pay attention to the direction of pull when releasing the rescue handle, here you can find an overview about the ideal and rather unfavorable directions of movement:



A reserve chute deployment can be made more difficult by the following factors:

- \rightarrow The reserve chute is too large or too bulky for the compartment or the front container.
- \rightarrow The reserve chute is not packed in the shape of the front container.
- \rightarrow The reserve chute is not thrown with the appropriate throwing technique.
- \rightarrow The reserve chute has too much volume after repacking.
- $\rightarrow\,$ Because arm length is crucial for a successful reserve chute deployment, smaller persons with short arms may not be able to deploy the reserve chute.
- $\rightarrow~$ In emergency situations, high G-loading can occur, which can make deployment even more difficult.



BEFORE EACH FLIGHT, CHECK TO SEE IF THE RESCUE HANDLE IS IN THE RIGHT POSITION AND WHETHER THE SPLINTS OF THE HANDLE ARE SITTING COR-RECTLY. REACHING FOR THE RELEASE HANDLE TO TEST ITS POSITION EVERY FLIGHT CAN HELP YOU MEMORIZE THE POSITION SUBCONSCIOUSLY.

6 INITIAL SETUP

SPEED SYSTEM

The skywalk SLEEVE can be equipped with a speed system. However, the length of the speed bar travel must be set individually on the paraglider.

Proceed as follows:

- **1.** Thread the line of the accelerator through the metal rings. Make sure that the line is guided on the outside of the harness.
- **2.** At both ends of the line, the Brummel hooks can be fixed to the desired position with a bowline knot.
- **3.** If the speed system is set too short, it won't be possible to fully extend your legs.
- **4.** If the speed system is set too long, the pulleys on the risers will not meet and the full accelerator travel can't be reached.
- **5.** In the optimal case, your legs are stretched out fully just as the pulleys on the risers of the paraglider touch each other.

PACKING

- **1.** Place the two nitinol rods (stiffening in the thigh area) on top of each other and don't kink or bend them.
- 2. Compress the harness and stow it in the storage bag.

HOOK IN THE PARAGLIDER

Between the paraglider and the harness there are two connection points per side (main suspension and speed bar line). Make sure that both risers of the paraglider are connected to the carabiners of the harness without twisting and that the carabiner is fully closed. In addition, the speed system of the paraglider must be connected to the speed bar of the harness via the Brummel hooks.

It is important that the speed bar line runs freely along the outside of the harness without any obstacles.

The proper connection between the harness and the paraglider must be carefully checked before each launch.

7 HARNESS ADJUSTMENTS

Together with your dealer, the SLEEVE is adjusted and checked. You will then make the basic adjustment yourself while sitting in a harness simulator.

Follow these steps to put on the harness:

- 1. Put your arms through the shoulder straps.
- **2.** Guide the leg loops between your legs and close the straps on the left and right by attaching the loops to the main carabiner. Make sure that the left side is marked red and the right side is marked blue.
- **3.** Make sure that the loops are not twisted and check that 3 loops are attached to the carabiner on each side. The openings of the main carabiners point against the direction of flight.

8 REPLACEMENT OF INDIVIDUAL PARTS

CARABINER

When replacing carabiners, make sure that all three color-coded webbing loops (back support/main suspension/leg loops) are passed through the carabiner. Quick-Out carabiners can't be installed on the SLEEVE.

NITINOL ROD

- 1. To exchange the Nitinol rod, open the zipper on the bottom of the leg loops.
- 2. Remove the old Nitinol rod and reinstall the new one.
- 3. Close the zipper.
- **4.** Make sure the zipper puller disappears completely into the garage, to prevent the lines from getting caught.

9 FLYING SAFE

PREFLIGHT CHECK

It is important to check all paragliding equipment thoroughly before every flight to see if it has any defects. Also check the paraglider after long flights and after long storage.

Check thoroughly that:

- ightarrow No visible damage to the harness or carabiners is present that can affect airworthiness.
- → The reserve parachute container is correctly closed and is connected to the harness, that the splints are threaded completely through the loops and that the rescue handle is correctly mounted.
- \rightarrow All buckles, straps and zippers are shut and secured.
- $\rightarrow\,$ The paraglider is correctly hooked to the harness and that both carabiners are correctly closed and secured.
- \rightarrow The speedbar is properly hooked into the speed system of the risers.
- $\rightarrow~$ Pull the accelerator line left and right once to fix the speed bar to the harness with the cord stoppers.
- $\rightarrow~$ All pockets are closed and that no loose items are hanging around.
- $\rightarrow~$ Your backpack doesn't inferfere with the harness closing system.
- $\rightarrow~$ The leg loops are closed before you launch!



DO NOT LAUNCH IF YOU FIND ANY DEFECTS, EVEN SMALL ONES! IF YOU FIND ANY SIGNS OF DAMAGE OR ABNORMAL WEAR AND TEAR, CONTACT YOUR FLIGHT SCHOOL OR SKYWALK DIRECTLY.

BEHAVIOR IN THE EVENT OF A RESERVE CHUTE DEPLOYMENT

- \rightarrow Locate the rescue handle in front of you and hold it tightly with one hand.
- \rightarrow Pull the handle firmly away from the harness in a continuous and forward movement to release the split pins and pull out the reserve chute.
- ightarrow Make sure that you throw the reserve chute in the deployment bag into free airspace.
- $\rightarrow\,$ If possible, throw it in the opposite direction of any rotational movement and let go of the handle!
- $\rightarrow\,$ Once the reserve chute is open, try to keep it from tangling and swinging. It is best use the B-, C- or the brake lines to pull the glider symmetrically toward you.
- $\rightarrow\,$ When you land, straighten up as much as possible and use the parachute landing fall (PLF) technique to minimize the risk of injury.

WHAT TO DO IN EMERGENCY SITUATIONS AND EXTREME FLIGHT CONDITIONS

Disturbances of the paraglider that are caused by thermal lift or turbulence are transmitted perceptibly via the harness mounts to the seat shell.

To avoid getting tipped to the side, make sure that you are always sitting in the middle of the harness. Also make sure that you don't lose your grip on the brake handles so that you can react quickly and without delay to extreme flight conditions. Read about the behavior of your glider in extreme flight conditions in the appropriate manual. Should you fly into an object or land in a tree, be calm and notify the authorities.

FLYING ON BAR

The speed bar should be secured to the harness prior to launch. To use the speed bar, you will need to make some effort. This can affect the sitting position in the harness. Therefore, we recommend an upright position in the harness. Adjust the harness before your first attempt of flying on bar.

We remind you to only fly in wind conditions that don't require constant use of the speed bar. To reach the maximum speed, press the speed bar firmly until both pulleys on the A-risers touch each other. As soon as you apply the speed bar, the angle of attack will be reduced and the speed increases, but the paraglider becomes less stable and can collapse more easily. For this reason, always use the speed bar with adequate altitude over the ground and distance from obstacles and other aircraft.

Avoid adjusting the speed bar too short. It is important to avoid unintentionally activating the speed system due to a setting that is too short. Collapses on bar are normally more impulsive and demand fast reactions.



NEVER FLY ON BAR IN TURBULENT AIR. NEVER FLY ON BAR NEAR THE GROUND.

10 OPERATING LIMITS

The harness may only be flown within the operating limits. This limit is exceeded as soon as one of the following occurs:

- \rightarrow Flying outside the maximum permissible take-off weight.
- \rightarrow Flying in the rain, in snowfall, extremely turbulent weather conditions or in strong winds.
- \rightarrow Flying in clouds or fog (visual flight).
- $\rightarrow~$ Flying with insufficient pilot experience.
- \rightarrow Flying with multiple seats.
- \rightarrow Flying with wet canopy.
- $\rightarrow~$ Flying in temperatures below -15°C and above 50°C.
- $\rightarrow~$ Aerobatics (flight maneuvers with an inclination of more than 135 degrees).

The SLEEVE is approved according to DIN EN 1651 for a maximum pilot weight of 110 kg. Due to the higher stress on the material, it is strongly discouraged to fly extreme flight or acro maneuvers.

The skywalk HIKE aluminum screw carabiner is an ultralight product (38 g, 22 KN) and requires special care:

- $\rightarrow~$ Do not use the carabiner if there is any visible external damage or wear.
- $\rightarrow~$ Avoid transverse loads, strokes and do not drop the carabiner.
- $\rightarrow~$ The carabiner should be replaced after 3 years or 300 hours.

WINCH-TOWING

The SLEEVE is not recommended as a harness for winch towing.

TANDEM FLIGHT

The SLEEVE is suitable as a light Hike & Fly tandem passenger harness. The responsible tandem pilot should always be aware of the increased risk of material wear due to intensive use.

SAFETY TRAINING AND FLYING OVER WATER

We do not recommend using the SLEEVE for flying over water or for safety training. The direct looping of the leg straps into the carabiners makes it more difficult to get out of the harness when landing in water.



BE CAREFUL WHEN FLYING OVER WATER!

LIFETIME

The harness is your direct connection point to your paraglider. You are responsible for checking the harness before each use. If you have any doubts about its safety, do not use the harness under any circumstances and contact your skywalk dealer. All webbing, thread, cloth and hardware have a limited life span. To determine if your harness is still safe, you should inspect it according to the inspection protocol attached at the end of this manual.

skywalk harnesses that are properly stored and meet all inspection criteria can be used for up to 10 years from the sample inspection date. You can find the sample inspection date on the sample inspection tag located on the left side of your harness. Please keep in mind that some factors that affect the life of your harness are not visible. You should know the full use history of the harness.

You should know what environmental influences (UV light, salt water, extreme heat, etc.) or chemical influences (aggressive cleaners, petroleum, oils, lubricants, acids, etc.) the harness has been exposed to. If the harness has been subjected to a great deal of tress, such as a rescue deployment, crash, or tree landing, it should no longer be used and should be destroyed immediately.

11 MAINTENANCE, CARE

The selected materials used in the SLEEVE make it necessary to treat them carefully and in a professional manner. Make an effort to take care of your harness and keep it clean to preserve its airworthiness over the longest possible time.

- $\rightarrow~$ Avoid dragging your harness over stony ground and always try to land in an upright positon.
- $\rightarrow~$ Don't leave your harness lying in the sun unnecessarily long. UV radiation is very damaging to the material.
- \rightarrow Store it in the bag when you don't use it.
- $\rightarrow\,$ Store your paragliding equipment loosely packed in a cool and dry place. If it gets wet, always dry out your equipment before packing it.
- $\rightarrow\,$ To clean it, just use a brush or a damp cloth. Use mild soap to clean it only when absolutely necessary. If you do, first remove other parts like the reserve parachute. The coating of the material can be damaged by brushing or rubbing.
- → Let the harness dry in a well-ventilated, shady place if it was wet. If the reserve parachute gets wet, (e.g. during a water landing), then it is necessary to open it up, let it dry, and pack it again.
- $\rightarrow~$ Zippers should be treated with silicon spray once a year.

MATERIALS

The skywalk SLEEVE is very durable and made exclusively from high-quality materials. skywalk has selected the best possible combination of materials in terms of resilience, weight and durability.

We are aware that the durability of the equipment is one of the decisive factors for the satisfaction of the pilot, but due to the choice of material and construction of the harness we would like to point out that the harness is more prone to wear and damage if used improperly.

The lifespan of this product is highly dependent on your mindfulness.

The following activities can significantly reduce the lifespan of your harness:

- \rightarrow Acrobatic flight maneuvers
- \rightarrow (Coastal) soaring with permanent touch & go
- \rightarrow Extensive ground handling
- \rightarrow Improper handling of the equipment

MAINTENANCE CHECKLIST

In addition to your normal preflight procedure, you should also take a close look at your SLEEVE after the reserve parachute has been packed and re-installed – normally every six months but no later than every twelve months. Naturally, it's important to also check your harness closely after unusual circumstances, for example after a hard landing or a tree landing, or if the harness shows above-average wear and tear. When in doubt, always consult an expert.

Here is what to check:

- \rightarrow Check all straps and buckles for wear and tear and damage.
- → The stitching of all seams should be checked and, if in doubt, should be repaired to keep problems from propagating.
- → Both carabiners should be renewed after no more than 5 years or maximum 1500 flight hours. Impact to the carabiners can result in invisible damage that could lead to failure during use.

The documentation for service work should be entered with the name of the repair person, stamp and signature.

STORAGE

Ideal is a dry, dark place with a constant temperature. Moisture is an old enemy of the durability of all paragliding equipment. For this reason, always dry your equipment before you store it, preferably in a heated and well ventilated room, so that moisture can evaporate.

12 REPAIRS

Repairs should only be carried out by the manufacturer or by an authorized skywalk service center. Exceptions include the repair of small cuts (up to about 3 cm that don't affect a seam).

CHANGES TO THE HARNESS

Your skywalk SLEEVE is manufactured within the regulated parameters of tolerance. These parameters are very narrow and must not be altered under any circumstance.



UNAUTHORIZED CHANGES INVALIDATE THE TYPE APPROVAL AND ALL LIABILITY CLAIMS AGAINST THE MANUFACTURER AND ITS DISTRIBUTORS ARE INVALIDATED.

13 DISPOSAL

When choosing materials, skywalk places high value on environmental compatibility and the highest quality control. Should your harness someday no longer be flyable, remove all metal parts.

All remaining parts can be turned in at a recycling center. The metallic parts can be turned in at a metals recycling center. The best solution is to send your retired skywalk harness directly to us. We will then take care of recycling it.

14 HOMOLOGATION

The SLEEVE is certified to EN standard.

The SLEEVE is defined as a lightweight sport aircraft with an empty weight of less than 110 kg in the paraglider category.

The many homologation tests are the last hurdle in the development of a skywalk harness. The homologation tests only take place when the test team is completely happy with the harness development

15 MAINTENANCE CHECK

According to LTF regulations your harness will have to undergo a maintenance check after 24 months. The maintenance check has to be carried out by the manufacturer or its representative.



IF THE HARNESS IS SUBJECTED TO ABOVE AVERAGE WEAR AND TEAR (EXTREME FLIGHT MANEUVERS, FORBIDDEN ACROBAT FLIGHT MANEUVERS) IT SHOULD BE INSPECTED EARLIER OR SHOULD UNDERGO AN ADDITIONAL INSPECTION!

16 TECHNICAL DATA

Pilot height (cm)	160 - 195
With chest strap (cm)	44
Weight harness (g)	195
Weight carabiner (g)	75
Certification	EN 1651: 2018
Maximum load (kg)	110

MATERIALS

N. 50 SD Mini R/S
Protection Cover DYN 4mm + 5mm
skywalk HIKE aluminium carabiner
Nitinol 2.5 mm

17 NATURE AND ENVIRONMENTALLY COMPATIBLE BEHAVIOR

We have taken the first step towards ecological awareness with our nature-friendly sport. Especially with our mountain climbers who prefer to climb to the launch site. Nevertheless, we plan on continuing in the same vein. This means specifically: clean up your trash, stay on marked trails and don't cause unnecessary noise. Please help to maintain the balance of nature and to respect animals in their territory.

18 CLOSING WORDS

The skywalk SLEEVE is at the absolute leading edge of development in the market for ultralight harnesses. It cost us a lot of time to develop this harness, but it was also a lot of fun. In this development we recognize the challenge of making the right product for every area and individual taste. We are pleased if you notice this during your first flight and if you feel a certain unity with your glider from the very beginning. The SLEEVE will provide you with plenty of joy over many years if you treat it and care for it properly.

Respect for the demands and dangers of our sport are essential for successful and beautiful flights. Even the safest paraglider or harness can be dangerous due to misjudgments of meteorological conditions or pilot error. Always remember that flying sports are potentially risky and that you are responsible for your own safety. We advise you to fly carefully and to respect laws in the interest of our sport, because every pilot always flies at his or her own risk!

WE WISH YOU A LOT OF FUN WITH YOUR NEW HARNESS AND ALWAYS HAPPY LANDINGS!!

Your skywalk Team

PRO GUIDE // SLEEVE

SKYWALK

19 TEST PROTOCO	Date:		
Customer, Name:			
Adress:			Tel. Nr:
Product type:	Size:	Serialnumber:	
Certification number.:		Last service:	
Manufacturing date::			

Checklist:	Result [+/–]:	Defects:	Suggestion:
Identification			
Main suspension:			
Carabiner: (skywalk HIKE aluminium carabiner max. 3 years / 300 h no cracks or notches)	+ -		
Main suspension: (no damage / no excessive wear)	+ -		
Webbing at mainseat (no damage / no excessive wear)	+ -		
Legstraps: (no damage / no excessive wear)	+ -		
Seams:			
Dyneema webbing 4 + 5 mm (no damaged, frayed or open seams)	+ -		
Cloth:			
Seat shell: (no torn seams or wrenched cloth)	+ -		

Condition:	new		
	very good condition		
	good condition		
	used		
	ication, check within shorter periods		
not usable anymore, doesn't meet certification			
nepuits.			
		1-	
Signature of	checker:	Date:	
Name of che	cker:	Company stamp:	



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FO DURE PASSION FOR FLYING